Reggiani printers

This document bridges the gap between the Fiery XF 6.5 documentation and the Reggiani documentation. The driver supports the following printers:

Printer	Market	Color configuration	Mirror default	Conveyor belt	Maximum width (mm)
Reggiani PRO	Soft signage	KCMY	Direct	Yes	340
Reggiani TOP		KCMY	Direct	Yes	340
VUTEk FabriVU		KCMY	Transfer	No	520
Reggiani ReNOIR Compact	Textile	Flexible	Direct	Yes	340
Reggiani ReNOIR NEXT		Flexible	Transfer	No	340
Reggiani ReNOIR ONE		Flexible	Direct	Yes	340
Reggiani ReNOIR VOGUE		Flexible	Direct	Yes	340
Reggiani ReNOIR FLEXY		Flexible	Direct	Yes	340
Reggiani ReNOIR PRO		Flexible	Direct	Yes	340
Reggiani ReNOIR TOP		Flexible	Direct	Yes	340

The supported color configurations are:

Channel mapping	Color modes	Variations
KCMY	CMYK	KCMY, KCMYYMCK If the ink configuration is available, the effective channel mapping is flexible.
Flexible	CMYK CMYKORB CMYKRV CMYKOB CMYKOVB CMYKRVk CMYKORBk	Colors can appear in any order, with the following constraints: • Cyan, Magenta, Yellow and Black must be installed. • More than two times the same color (e.g. 3 x Black) is not supported. • A color mode is only supported if all inks of that mode are installed. • Golden Yellow is treated as Orange, but only if there is no Orange ink installed. Fluorescent Yellow and Fluorescent Magenta are also supported. They appear as printer-specific spot colors.

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Channel mapping	Color modes	Variations
	CMYKRB CMYKO CMYKV CMYKOV CMYKk CMYKcm CMYKcmk CMYKOBk CMYKRBk CMYKOVBk	

Any VUTEk FabriVU and Reggiani soft signage or textile printer supported with Fiery proServer / Fiery XF 6.5 should have a minimum printer software version installed to benefit from:

- ERP and Fiery Navigator integration Level 2 support
- Flexible channel mapping support (printer inks are translated into corresponding color mode(s) in Fiery XF
- Minimum print length support of 40 mm (previously 100 mm)
- job names up to 104 characters (previously 70 characters)

EFI soft signage and textile printers	Printer software version				
	Jet Master and GUI	Ripper	ReNOIR	GUI-One	Directory synchronization tool
Textile					
Reggiani ReNOIR NEXT	-	-	-	1.0.2.6	-
Reggiani ReNOIR FLEXY	-	-	-	1.0.2.6	-
Reggiani ReNOIR VOGUE	1.0	-	-	-	-
Reggiani ReNOIR ONE	-	-	-	1.0.2.6	-
Reggiani ReNOIR PRO	-	1.3.3.7	2.0.1	-	1.0.0.0
Reggiani ReNOIR Compact	-	1.3.3.7	2.0.1	-	1.0.0.0
Reggiani ReNOIR TOP	-	1.3.3.7	2.0.1	-	1.0.0.0
Soft signage					
Reggiani ReNOIR PRO	-	1.3.3.7	2.0.1	-	1.0.0.0
Reggiani ReNOIR TOP	-	1.3.3.7	2.0.1	-	1.0.0.0
VUTEk Fabri VU	-	-	-	1.0.2.6	-

Setting up the printer

Setting up the Reggiani software

You must configure the ink set, and transfer the information about installed inks and ink order to Fiery XF. Fiery XF requires this information for flexible channel mapping.

The following steps are essential to set up a new Reggiani printer.

1 In the User Configuration menu, click Colors configuration, and configure the ink set.

Note: Older printers may not have this menu. In this case, the soft signage printer drivers support fixed KCMY and KCMYYMCK channel mapping.

2 On the Edit menu, click Tools, and then click Send print parameters to RIP.

This step creates and populates the Reggiani folders.

Setting up the Reggiani folder

Reggiani printers share a "Reggiani" folder. A local "Reggiani" folder is all that is needed for simulation purposes. The name of the Reggiani folder is not important. For example, you can call it "MyReggianiNext".

The "Reggiani" folder requires two subfolders:

- jobs_to_prepare
  This folder is the output folder for the print files. The driver automatically creates a "jobs_to_prepare" subfolder during job processing if it is not already there.
- print_parameters
  This folder contains the printer configuration and all the print modes of the printer. **You must be able to access this folder to use the Fiery XF output device.**

You must set up a connection to the file server (Reggiani PC) on the Reggiani printer. The Regginai PC runs all the time, even if the printer is powered off.

To access the file server and the Reggiani folder, you need read/write access. Reggiani's default credentials are:

User name: UTENTE
Password: Reggiani123456

The Reggiani folder resides at the following addresses:

Local: C:\REGGIANI
Network: *machine_ip*\Reggiani

Setting up Fiery XF

Install Fiery XF 6.5 or later. The Fiery XF drivers for Reggiani printers are available only for the Windows server.

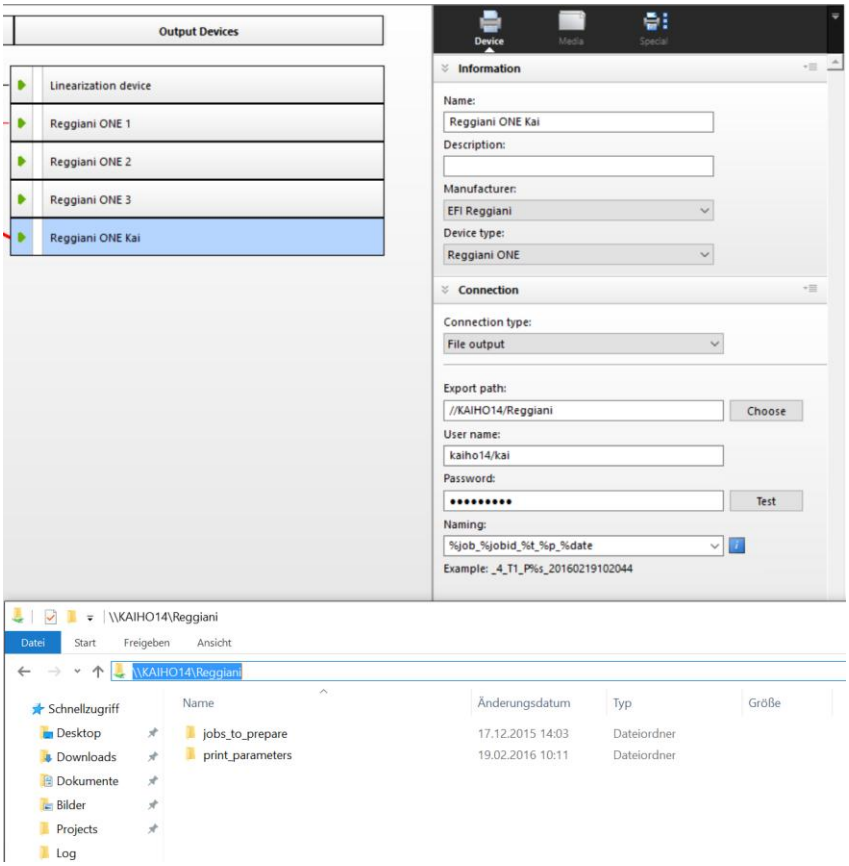
Selecting the printer in Fiery XF

1 Start the Fiery XF server. Then start the Fiery XF client.

2 In System Manager, set up the linearization device, e.g. Reggiani ONE.

Selecting the “Reggiani” folder in Fiery XF

1 In Fiery XF, go to System Manager. On the Device tab, open the Connection pane.



2 Under “Connection type”, select “File output”.

3 Set the export path to //ONE00/Reggiani.

You can copy and paste the network path. (You can also set up a local connection for testing purposes. However, it is recommended that you do not use a local connection for printing.)

Note: Make sure to select the “Reggiani” folder as the Export folder, not the “jobs_to_prepare” subfolder. If you want to use the default Export folder instead of the “Reggiani” folder, the print files will be created in “Export/jobs_to_prepare”. However, this works only if the Export folder already contains a valid “print_parameters” folder.

4 Enter the user name “Utente”, and the password “Reggiani123456”, and click Save.

5 Click Test to verify that you can access the network export folder.

If you see an error message, check that the user name, password and export path settings are correct.

6 Set the workflow online, by making sure all the arrows are green.

7 Right-click Fiery XF Control and click Fiery XF Server Start.

On server start the Fiery XF server reads out the information from all configured “Reggiani” folders.

Verifying the setup

print_parameters folder status

Check that the "Reggiani" folder and its contents are valid.

1 Go to System Manager. On the Special tab, open the Special Printer Settings pane, and check the status of the print_parameters folder.

Status	Comment
No content found	One of the following is true: • The Reggiani folder is not configured correctly. • The Fiery XF server was not restarted after the "Reggiani" folder was configured. • Access problems are preventing data being read from the "print_parameters" folder.
Valid folder	All the necessary data is available.
Multiple valid folders	All the necessary data is available. The information is merged from more than one folder. This folder status is also displayed if more than one valid Regginai folder exists.
No print mode entries	print_parameters_list.txt is not valid or all related *.ini files are not valid.
Configuration.ini file is missing or invalid	Configuration.ini must be readable and contain valid entries: blanket_y_height, no_of_colors, and machine_name

The last two errors should not occur.

The printer drivers support multiple folders of the same printer type, with the following exceptions:

- If you create a temporary output folder, the separations from all color configurations will be created in this folder.
- For multiple soft signage printers of the same model, the ink configuration must be available either for all printers or for no printer.

Print modes test in Color Tools

Check that the print modes are available.

1 In Fiery XF, go to Job Explorer and start Color Tools.

2 In the start screen, click Create Base Linearization.

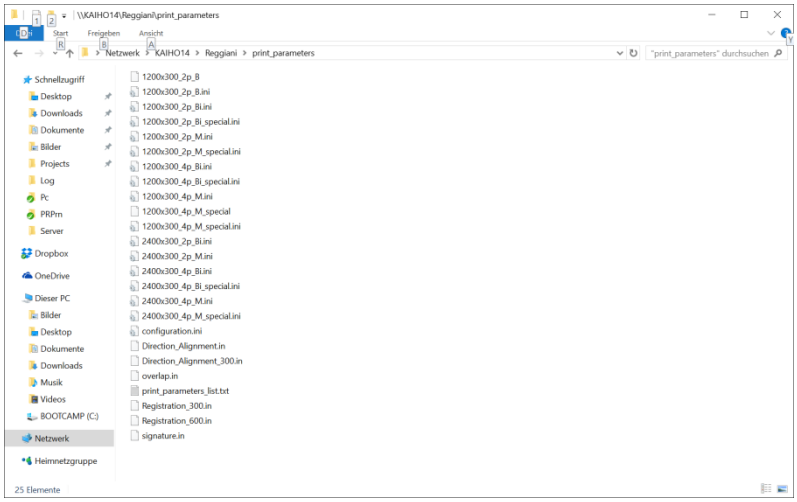
3 Under "Output settings", check that the printer's supported resolutions and color modes are available.

A resolution of 100 x 100 dpi indicates that the print_parameters folder has a status of "No content found" or "No print mode entries" (see table above).

Configuration files

print_parameters folder

The print_parameters folder contains information that is used by the printer driver. Typical content looks like this:



Status	Comment
configuration.ini	This file contains the printer configuration. The Fiery XF driver reads out the following entries: **drop_size *n***: The default is 7, 12, 18. Valid entries are bigger than 0 and smaller than 500. The values are displayed in parentheses in the list of dot sizes in Color Tools. **ink_configuration**: Which inks are installed in which slots, e.g. ink_configuration=Black,Cyan,Magenta,Yellow,Orange,Red,Blue,Black You must configure the ink set in the Reggiani software: • Known colors are: Cyan, Magenta, Yellow, Black, Golden Yellow, Orange, Red, Green, Blue, Violet, Light Cyan, Light Magenta, Light Black, Fluorescent Yellow, Fluorescent Magenta, Diluent, Dummy • Use “Dummy” for empty channels • The same color cannot appear more than two times If the Reggiani software is too old, you can add the line manually using Windows’ text editor: • Add the whole line as in the example above. Confirm that you can set the cursor at the beginning of the line below. • Change the colors to the actual colors in your printer. • Do not add additional spaces.
print_parameters_list.txt	This file lists all print modes. For each line, there is an *.ini file with the following details: • The base name of the file is the name of the print mode. • y_res and x_res correspond to the resolution in the Reggiani coordinate system.

ReggianiPrn.ini

The ReggianiPrn.ini is located at C:\\ProgramData\EFI\EFI XF\Server and contains details of the driver configuration. If the file does not exist, the driver creates it with default values.

Note: Depending on your Windows setting, the file extension (.ini) may be hidden for known file types.

The Fiery XF driver reads out the following entries:

Entry (default value in bold)	Description
enable_unfiltered_print_modes	0 = Use only print modes listed in print_parameters_list.txt 1 = Use all print modes in print_parameters folder
Enable_print_mode_group	0 = Do not show the print mode group on the Special tab 1 = Show the print mode group on the Special tab
Enable_dpi_device	0 = Do not show the Reggiani DPI device 1 = Show the Reggiani DPI device. This is a test variant of ReNOIR Pro which supports integer DPI resolutions, e.g. 720 dpi
preview_max_width_pixels preview_max_height_pixels	Size of the preview window. The default is 591 in both directions.

Operation

Channel duplication

Fiery XF has special functions to generate data for duplicated ink channels.

CMYK printers

If no ink_configuration.ini exists, Fiery XF reverts to the CMYK color mode, which is either KCMY or KCMYYMCK.

All printers with 300 dpi print heads and 8 ink channels should be configured so that the CMYK print data is received in 8 TIFF separations. 600 dpi printers such as Reggiani PRO and printers with only two print heads are an exception to this.

Fiery XF offers the following separation schemes as dot sizes:

ID	Name	Drop size (picoliter)	No. TIFFs	Comments
1	Split18 (7 12 18)	7 12 18	8	One halftoning stage for two channels plus 50% masks
4	Split25 (7 12 25)	7 12 25	8	Mask applied for 7, 12. The third dot of the halftoning fires on both print heads, 18 plus 7 which results in an effective 25.
10	Split36 (7 12 18 36)	7 12 18 36	8	Uses 4 dots at the halftoning stage. Mask applied for 7, 12, 18. The fourth dot of the halftoning fires on both print heads, 18 plus 18 which results in an effective 36.
43	Split36+ (7 12 18 25 30 36)	7 12 18 25 30 36	8	0%-50% is done by one print head only. Above 50% the second print head fills up.
64	NoSplit (7 12 18)	7 12 18	N	No split is done.

The modes Split36 and Split36+ give you the maximum ink amount possible from two print heads. The mode Split18 gives you the maximum amount of ink from one print head. Split25 is in the middle in terms of ink amount.

When you start a base linearization, it is normal to start with Split36. Afterwards, look at the effective channel ink limits (pre-ink limits multiplied by ink limits):

- If the biggest effective value is 50% or less, use Split18 and multiply your values by 2.
- If the biggest effective value is 70% or less, use Split25 and multiply your values by 1.44 (36/25).

If your machine type is configured for 4 TIFF separations, you do not have the flexibility of the Split*N* modes. In this case, you must use the NoSplit mode. Using a Split*N* mode with a machine type configured for 4 TIFF separations results in a poor print quality because half the print data is ignored.

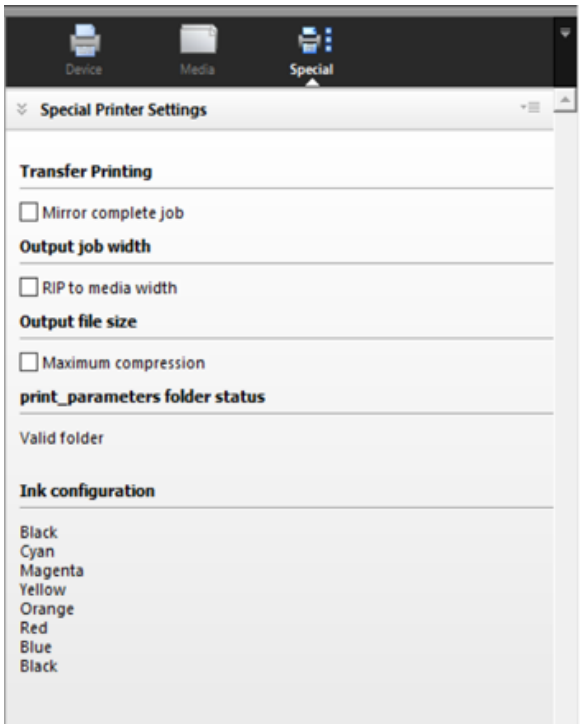
Flexible printers

Newer Reggiani printers write the ink_configuration.ini and transfer the information to Fiery XF accordingly.

However, the dot sizes Split*n* are only available if there is at least one duplicated channel. For example:

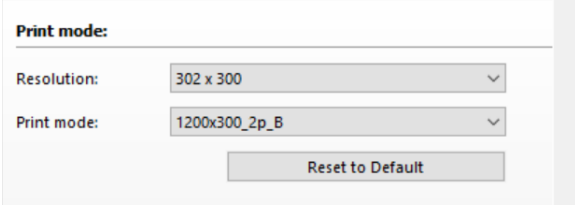
- KCMYORBk: NoSplit only
- KCMYORBK: All split options available. In this case, the split is applied to the two K channels. All other channels operate in NoSplit mode.

Special tab



The following settings are available on the Special Printer Settings pane:

Setting	Description
Transfer printing	If you select “Mirror complete job”, the whole page, including the footer (job ticket and control strips), is mirrored. This compensates for the mirroring effect of the transfer.
Output job width	If you select “RIP to media width”, the output files become as wide as the media. This pushes the printer-generated tickling lines to the conveyor belt. This settomg is only available for machines with a conveyor belt (Reggiani ONE and Reggiani PRO).
Output file size	You can change the compression rate for the separated TIFF files. “Maximum compression” yields a better compression but it slows down the processing speed on Fiery XF and on the RIP application. Use it only if each separated TIFF file is 2GB or more.
print_parameters folder status	The status displays “Valid folder”.
Ink configuration	Displays the available ink channels. TIFF files are generated according to this information. If this area is not visible, TIFF files are either KCMY or KCMYYMCK.

Setting	Description
Print mode (optional)	This setting is only available if the driver configuration file contains the entry “enable_print_mode_group”.  If “Print mode” is available, you can print a job with settings completely different from the settings used to create the profile. However, be aware that there is a high risk of poor color reproduction.

Fluorescent ink

Fluorescent ink is supported by the two predefined, printer-specific spot colors FLUORESCENT_YELLOW_INK and FLUORESCENT_MAGENTA_INK. These two channels bypass color management and go directly to the printer driver.

Multiple printer support

The print mode information of the Fiery XF printer driver comes from the physical printer(s). You do not need the information in this section:

- If you connect Fiery XF to only one printer
- If you connect Fiery XF to printers of different types (e.g. a Regginai ONE and a Reggiani PRO)

This section explains what happens if you connect Fiery XF to more than one printer of the same type, e.g. two Reggiani ONE.

Status

The sections “print_parameters folder status” and “Ink configuration” show information for multiple folders if more than one Reggiani folder exists. This indicates multiple printers of the same type.



Status details

ReggianiPrnStatus.txt (located in the Fiery XF server's data folder) contains information about folders and print modes that do not exist on all physical printers. Below is an example of the file's content:

```
ReggianiPrnStatus.txt -- Status of Reggiani output folders

ReggianiPrintParameters id=6200, 17 print modes from:
   C:/ProgramData/EFI/EFI XF/Server/Export/ONE-1/Reggiani/print_parameters/ (2)
   C:/ProgramData/EFI/EFI XF/Server/Export/ONE-2/Reggiani/print_parameters/ (3)
   C:/ProgramData/EFI/EFI XF/Server/Export/ONE-3/Reggiani/print_parameters/ (4)
   2400x300_8p_Bi_Kai only in { 3 4 }
   2400x300_8p_M_Frank only in { 4 }
   2400x300_8p_M_Frank2 only in { 4 }

ReggianiPrintParameters id=6201, no print modes

ReggianiPrintParameters id=6202, 14 print modes from:
   C:/ProgramData/EFI/EFI XF/Server/Export/NEXT/Reggiani/print_parameters/ (1)

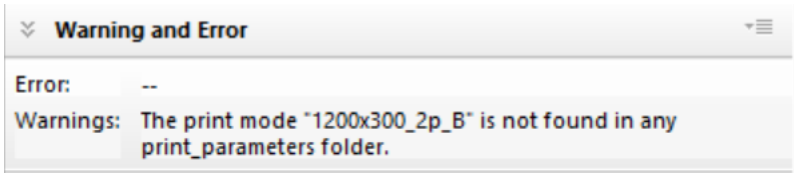
ReggianiPrintParameters id=6203, no print modes
```

In this example, "2400x300_8p_Bi_Kai" does not exist on the ONE-1 printer. The two "Frank" print modes exist only on ONE-3. All other print modes can be used on ONE-1, ONE-2 and ONE-3.

Printing

All print modes are available and can be selected. On printing, the printer driver checks if a print mode is not supported on that particular printer.

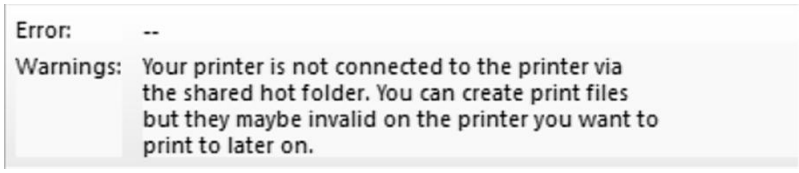
If the print mode is not supported on any printer, a warning message appears:



If the print mode is not supported on that particular printer, a different warning message appears:



In special circumstances, the Reggiani folder may not be valid (e.g. if the **print_parameters** folder does not exist or if the Fiery XF server has not been restarted). This can happen, for example, if you change the Export folder just to collect print files without sending them to an actual printer. Although the job is still printed, the following warning message also appears:



Support case simulation files

If you need to contact our Support team, we require the “print_parameters” folder from the Reggiani printer, in addition to the usual files (e.g. Server.log).